THIS PAPER IS AN INDIVIDUAL EFFORT ON THE PART OF A STUDENT AT THE US ARMY WAR COLLEGE. IT IS FURNISHED WITHOUT COMMENT BY THE COLLEGE FOR SUCH BENEFIT TO THE USER AS MAY ACCRUE.

STUDENT ESSAY

22 April 1966

BRAZIL, A POTENTIAL WORLD POWER?

By

BERKELEY S. GILLESPIE, JR.

JUL 21 1966

Lieutenant Colonel, Artillery

U. S. ARMY WAR COLLEGE



REPRODUCTION OF THIS DOCUMENT IN WHOLE OR IN PART IS PROHIBITED EXCEPT WITH PERMISSION OF THE COMMANDANT, US ARMY WAR COLLEGE.

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PENNSYLVANIA

AWC LOG # 66-4-103(B) U

Copy No. 1 of 12 Copies

Information for the Defense Community

DTIC® has determined on 10222008 that this Technical Document has the Distribution Statement checked below. The current distribution for this document can be found in the DTIC® Technical Report Database.
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.
© COPYRIGHTED. U.S. Government or Federal Rights License. All other rights and uses except those permitted by copyright law are reserved by the copyright owner.
DISTRIBUTION STATEMENT B. Distribution authorized to U.S. Government agencies only. Other requests for this document shall be referred to controlling office.
DISTRIBUTION STATEMENT C. Distribution authorized to U.S. Government Agencies and their contractors. Other requests for this document shall be referred to controlling office.
DISTRIBUTION STATEMENT D. Distribution authorized to the Department of Defense and U.S. DoD contractors only. Other requests shall be referred to controlling office.
DISTRIBUTION STATEMENT E. Distribution authorized to DoD Components only. Other requests shall be referred to controlling office.
DISTRIBUTION STATEMENT F. Further dissemination only as directed by controlling office or higher DoD authority.
Distribution Statement F is also used when a document does not contain a distribution statement and no distribution statement can be determined.
DISTRIBUTION STATEMENT X. Distribution authorized to U.S. Government Agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with DoDD 5230.25.

USAWC RESEARCH ELEMENT (Essay)

Brazil, A Potential World Power?

Ъу

Lt Col Berkeley S. Gillespie, Jr. Artillery

US Army War College Carlisle Barracks, Pennsylvania 22 April 1966

SUMMARY

Brazil is the fourth largest country in the world and, both geographically and demographically, makes up half of the South American Continent. She is of great strategic importance to the security of the United States. Potentially, Brazil is one of the richest nations in the world. The vast areas of undeveloped land and the great amounts of natural resources, coupled with her key location, make her an important ally of the West.

Many authorities agree that Brazil is or soon will be the most powerful nation in Latin America; and, if the proper reforms are instituted, she will one day become a world power. Thus, it becomes apparent that the United States should assist in her economic development and maintain her as a friend and ally.

BRAZIL: A POTENTIAL WORLD POWER

Brazil has been described as a sleeping giant--a most apt description. But there are ever increasing signs that this giant is restless and is, in fact, awakening from its long siesta.

Will Brazil one day become a world power? Can she overcome the lethargy which has characterized her past? To answer these and similar questions it seems appropriate to analyze the geography, the history, the economy, the people, the political organization, the military, and the scientific and technological developments of Brazil.

Before beginning such an analysis, however, it is important to understand where Brazil stands now. In area Brazil is the fifth largest country in the world. She ranks eighth in population and her per capita gross national product is \$168 as compared, for instance, to \$1200 in the Soviet Union. The life span of her people is 50 years, which is relatively low and points up the need for vast reforms in health, education, and welfare. Brazil possesses great quantities of natural resources, some of which are the greatest in the world, such as iron ore, forest products, water, and oil. Her climate is varied and is in general conducive to the attainment of a viable population. The government of Brazil has not been characterized by stability and can be considered a weakness in her quest for greatness and power.



51138 3-65

Geographically Brazil is of great strategic importance. Her location has played an important role in two world wars. Airfields and naval bases located on the northeastern bulge into the Atlantic played a vital part in keeping air and sea lanes open to allied traffic.

Geography.

Brazil is the largest country in South America, and, as mentioned, the fifth largest in the world. Only Russia, Canada, China, and the United States are larger. Brazil covers some 3,288,000 square miles or almost one-half of South America. All of the South American countries except Chile and Ecuador border on Brazil. The country is divided into four broad geographic regions: The Amazon Basin in the north; the dry northeast; the south-central highlands; and the temperate south.

The Amazon region is a sparsely settled, low-lying, tropical valley dominated by the Amazon River which rises in Peru and flows through 1962 miles of Brazilian territory. This river carries more water than any other in the world and also drains a larger area. The region is remarkably underdeveloped, although it is rich in forest products of all types, including rubber. This lack of development can be attributed primarily to the hot, humid, tropical climate which characterizes the area.

The dry northeast is a vast semiarid hinterland which covers about 19 percent of the total area of Brazil and has a population of nearly 25 million. This area is subject to severe droughts which accounts, in part, for the recurring economic crises.

The south-central highlands and the temperate south make up the heartland of present day Brazil. The most fertile and productive lands are found here, as well as the major manufacturing centers and the principal mineral deposits.

There are considerable variations in climate in Brazil. The highest temperatures occur in the dry northeast and the Amazon Valley while in the south there may be occasional snow. The Amazon Valley receives as much as 80 inches of rainfall per year while some 300,000 square miles in the northeast comprise an area that is almost a desert. Altitude, sea breezes, and distance from the coast all tend to modify the effects of latitude with a resultant average temperature throughout the country of from 61 to 84 degrees.

History.

The Portuguese explorer, Pedro Alvarez Cabral, landed in Brazil on 22 April 1500. Little did he realize at that time the extent of the country which he established. Six years before Cabral landed, Portugal and Spain had signed the Treaty of Tordesillas, which reserved this portion of the new world for Portugal. This new land was named "Brazil" after the valuable dyewood tree, brazil, which abounded there.

The first attempt to colonize Brazil was made in 1532, when Sao Vicente was founded. In 1534, Portugal divided Brazil into 15 captaincies or proprietary colonies; in 1549 a central government was established in Salvador to coordinate the colonizing.

Sugar cane was the staple crop at the colonial period. A prosperous plantation society, based on imported African slaves, soon developed. The discovery of gold in the late 1600's and diamonds in the 1700's led to mass immigration from Portugal; the boundaries were soon pushed west and south. This expansion led to the Treaty of 1750 between Spain and Portugal and fixed the boundaries of areas to be ruled by each in South America. Despite attempts by the Dutch and the French to colonize sections of this new land, Brazil remained a Portuguese colony primarily through the efforts of the colonists themselves who vigorously resisted these intrusions.

When France invaded Portugal in 1807, the Portuguese royal family fled to Brazil and Rio de Janeiro became the seat of the Portuguese government. Dom Joao VI ruled from Brazil until 1821, at which time he was finally forced to return to Portugal. When he left, his son, Dom Pedro, remained to govern Brazil as regent.

On 7 September 1822, Prince Pedro declared Brazil independent and became Emperor Pedro I. This break came without violence and in 1825 Portugal recognized Brazil's independence.

During Pedro's reign he patronized the arts, industry, commerce and public charity but did little for education or religion. In 1889, primarily because he had freed the slaves the year before without compensation to their owners, a bloodless coup d'etat was staged by the former slave owners and the army. Pedro was deposed, the Empire abolished and a federal republic formed.

From 1889 to 1930 Brazil was governed peacefully by elected Presidents. Since the first constitution was adopted in 1891, the Brazilian Government has closely followed, at least in form, that of the United States. A revolution in 1930 brought Getulio Vargas to the presidency. He governed as a dictator, remaining in power until 1945. Despite his fascist and rightest leanings, he instituted and was responsible for many social reforms.

Brazil broke diplomatic relations with the Axis Powers in January 1942 and seven months later entered the war on the side of the Allies.

The army forced Vargas to resign on October 29, 1945, and General Enrico Gaspar Dutra subsequently was elected president. A new constitution was adopted the following year. The government outlawed the Communist Part in 1947. It is interesting to note that Vargas was elected president by popular vote again in 1950. Because his term of office was constantly plagued by political and economic problems, he committed suicide in 1954. Juscelino Kubitschek became president in 1955 and served the full five year term. Junio Quadros was elected president in 1960 by a wide popular vote, but seven months after his inauguration he resigned. The vice-president, Joao Goulart, succeeded him. At the time of Quadros' resignation, Goulart was in Communist China, and the heads of the armed forces to whom he was unacceptable, announced that he would be arrested upon his return. There was, however, strong sentiment for the preservation of the constitution; and, after considerable maneuvering behind the scenes,

Congress passed a constitutional amendment to change the government from a presidential to a parliamentary system. Thus, the president's powers were reduced, and a prime minister was made the executive head of the government. The crisis was averted, and Brazil had again displayed its great "talent for compromise."

In 1964 Castelo Branco became president as a result of a military revolution and is serving at present. Presidential elections are scheduled to be held in October of this year. It is the outcome of these elections which might well play a decisive role in the future of Brazil.

The Economy.

The history of Brazil's economy is divided into six periods: dyewood, sugar cane, gold and diamonds, cotton, rubber, and coffee. In each of these periods Brazil's economy centered around a single commodity which at its height gave Brazil world leadership in production. In each instance, this leadership declined as a result of competition from other producing areas. The first period, dyewood, dated from about 1500 to 1550.

The second period was that of sugar cane and ran from 1600 to 1700. During this time Brazil supplied most of Europe's sugar, but its position weakened when the Dutch were excluded from Brazil and began sugar cultivation in the West Indies.

The discovery of gold in 1690 brought about the next period which lasted to about 1770. Diamonds were found about 1730.

Gold and diamonds were responsible for the settlement of much of the interior.

The cotton period ran from the middle of the eighteenth century until about 1890. The abolition of slavery and the rising interest in rubber caused a depletion of the cheap labor supply and cotton production dwindled.

The rubber period began around 1860 and ended about 1910.

During this time Brazil had a virtual monopoly as a supplier of rubber in the world market. This period came to an abrupt end when the East Indian region entered the scene. Brazil's rubber industry centered in the Amazon Basin where the rubber trees grow wild with an average of about two trees per acre. The lack of transportation and cheap labor in the Amazon area meant that Brazil could not compete with the plantation system of the East Indian region.

The sixth and last, and perhaps the most important, of these periods is the cultivation of coffee. The coffee period started around 1830 and since that time coffee has been the keystone of the economic structure of Brazil. The period began to wane during World War I when the high prices that prevailed stimulated coffee production in other Latin American countries. Although still important, coffee is no longer the single commodity upon which the economy rests.

During each of these periods, Brazil experienced great wealth and prosperity; however, lasting achievements from one

period to the next have been disappointing. The principal advantage which has accrued has been the development of different sections of the country.

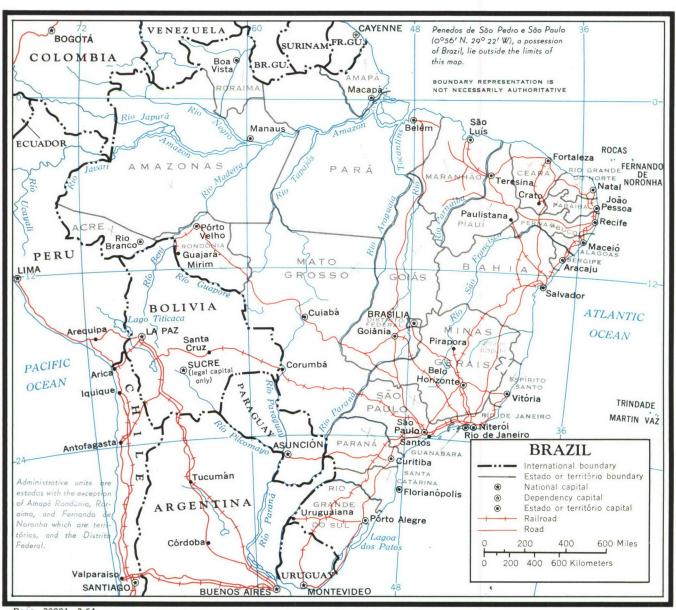
Brazil's economy today can be said to be one that is a mixture of agriculture and industry. This began about the time of World War I, but only in the last decade has industrial growth really gained momentum.

While agricultural earnings make up one-third of the national income, they account for 80 percent of Brazil's foreign exchange earnings. (Coffee accounts for about 60 percent of the latter.)

Even though 51 percent of the work force is employed on the land, only about two percent of the land area is cultivated. Wheat is the only food crop which must be imported while other items such as coffee, sugar, cotton, tobacco, cocoa beans, fruit, and vegetable oils are exported.

More than 50 percent of the total area is forested. The forests are among the world's richest in oil bearing fruits, gums, resins, oils, and waxes. Much of the timber in the Amazon region is of the lightweight, softwood variety and is of little value unless facilities are established for manufacturing plywood, pulp, or similar products. Pinewood, sisal, and carnauba wax, the principal forest export products, account for about 10 percent of the value of Brazil's exports.

The mineral resources of Brazil are varied and quite extensive. There are large deposits of iron, gold, diamonds, bauxite, nickel, uranium, and thorium, with iron ore by far the most



Base 39091 3-64

important. It is estimated that about 15 percent of the world's supply of iron ore is located in Brazil, with most of it being of extremely high quality. Oil is also an important product; its production has been steadily increasing. The demand for petroleum products has increased at about the same rate as production with the result that Brazil is still required to import large quantities of oil products.

There is a vast potential for hydroelectric power in Brazil. Estimates place this potential as high as 14 million kilowatts, although the presently installed capacity is only about five million. There is a large investment in the development of hydroelectric power, but it still cannot stay ahead of requirements.

Probably the most pressing problem in Brazil's economic development program is its grossly inadequate transportation system. Much of the difficulty in exploiting the great natural wealth of the country has been the direct result of a poor means of transport. The highway system is limited and in many cases poorly constructed. The railway system, about 23,000 miles of mixed gauge track, is only about one-tenth as large as the rail system of the United States yet the two countries are comparable in size. Air transport has played a vital role because of the difficulties and expense of constructing highways and railways. Much of the agricultural production which is shipped into the urban centers is spoiled on arrival because of inadequate transportation.

The recent rapid growth of the industrial sector is perhaps the brightest feature of the Brazilian economy. Recently, production has been increasing at a rate of more than 10 percent annually. This rapid growth, coupled with diversification, has made Brazil largely self-sufficient in many areas; however, she still must rely on imports in the fields of machine parts, industrial chemicals, pharmaceuticals, and petroleum products. The People.

Nearly 60 out of every 100 people in Brazil are white. The other 40 are made up of about 20 mulattos, 10 mestizos (mixed white and Indian), 8 negroes, and 2 Indians. Within this group of people are found two great paradoxes—exploding birth rate and high infant mortality; great wealth and degrading poverty. Much of the poverty and high mortality can be attributed to a vicious circle of poverty creating ignorance and ignorance creating poverty.

Brazil's population is about 80 million and has been increasing at the rate of slightly more than 3 percent per year, which places her among the higher in the world. This is a young population, with about 52 percent under 20 years of age. The task of providing education for this number of people is a monumental one as attested by the fact that half of the population is illiterate.

Since it became independent in 1822, many immigrants from Italy, Spain, and Germany have settled in Brazil. These people,



in addition to the original Indians, the Portuguese settlers, and Negro slaves, today are a mixed and varied race. Yet there is little or no racial discrimination.

Primary education is required by law, but only about half of the people can read and write. Most secondary schools are privately operated, primarily by the Roman Catholic Church. There are federal and state universities, Roman Catholic institutions of higher learning, and many technical schools. Public libraries operate in almost every town, and the government supplies many free books to these libraries in an effort to stimulate the intellectual life of the people.

The Political Organization.

Brazil is a Republic with its constitution modeled on that of the United States. Since its independence, it has been organized politically on three levels: federal, state, and local. Since their independence, Brazilians have adopted five constitutions, the last in 1946 following the dictatorship of Vargas. The constitution provides for suffrage for all at the age of 18, but it also denies voting rights to illiterates. This reduces the number of qualified voters to those over 18 in only one-half of the population.

The president and vice-president are elected by popular vote to five year terms and neither can succeed himself. Congress is made up of two houses. The Senate consists of three members from each state and the Federal District. The Chamber of Deputies

consists of members elected from the states and territories on a proportional basis. Senators serve for eight years and deputies for four. The Supreme Federal Tribunal is made up of 11 justices who are appointed for life by the president, with the approval of the Senate.

During its early history, there was a lack of growth of national political parties. This was occasioned in large part by the isolation of the little sovereignties or states and the lack of effective communications. Much later, during the Vargas regime, all voting was suspended. Actually, national political parties only began to grow after 1945. Since that time many parties have emerged, but, for the most part, they have been regional in their interests and without fixed doctrine. As stated in the February 11, 1966 issue of Time Magazine

Brazilians have always reveled in their genius for getting themselves into impossible predicaments, complicating the predicaments beyond belief, and then scrambling out of them at the last possible second not only unscathed but refreshed. They are masters of the fearless retreat, the intransigent compromise, the edged hedge, and the artful fix. No belief is so rigid that it cannot be reversed, no enemy so hated that he cannot be embraced. Revolutions are accomplished by collect telegram, prosperity by printing more money, and politics is riding a bandwagon. Absolutely nothing in Brazil is absolute. As a Brazilian Congressman once announced: 'My party stands neither for nor against this issue. Quite the contrary. And above all.'

When the current president, Castelo Branco, took power in 1964, his aim was to clean up Brazilian politics once and for all. In so doing, he annulled the 13 existing political parties and

ordered them to join together in the formation of two new parties.

One of these parties is called Arena (National Renovation

Alliance) and the other Modebras (Brazilian Democratic Movement).

The first of these, Arena, is the government party and the other,

Modebras, the loyal opposition party. This system is in effect

today, but the elections in 1966 and a new president could change

all of this. Only time will tell.

The Armed Forces.

The armed forces of Brazil have long played an important role in the government. The men in the armed forces are, for the most part, patriotic and dedicated to improving the welfare of their country. They believe that they are the guardians of constitutional civil government. This reaction was made clear during the Goulart crisis following the resignation of Quadros.

Brazil has long been an ally of the United States; she provided the services of her people and her resources in both World War I and II. During World War II the Brazilian expeditionary force fought with the Fifth Army in Italy. Today there is an important Atlantic missile range tracking station at Recife.

The strength of the army is about 200,000, the navy about 43,000, and the air force some 30,000. Thus, we find that the armed forces of Brazil are larger than those of other Latin American countries.

Brazilian Army engineers perform a large amount of railway and highway construction, because of the shortage of civilian

contractors and construction equipment. Such civic action programs are likely to continue until the government and industry can provide the required manpower and equipment.

Most personnel in the military are pro-United States. Since they provide a stabilizing influence in the government, it appears to be in the best interests of the United States to continue military assistance, to include the training of Brazilian officers.

Science and Technology.

The influence of advancing science and technology is gradually being felt throughout Brazil. Although still an agricultural country in many ways, revenue from industry is overtaking that from agriculture. Brazil now produces her own automobiles and the parts to go with them. Steel production is over two million tons per year. Appliances are being produced in volume. The rubber factories produce over a million tires per year. Textiles account for about 27 percent of the total industrial production; and metals, 11 percent. The production of leather goods, furniture, cement, pottery, chinaware, and ceramics lead the other major industries.

Sao Paulo city is the center of this industrial complex.

Only 84 years ago it was a town of some 25,000 people; today it covers 535 square miles and has a population of about five million. There are more than 23,000 factories in this bustling metropolis.

Great strides are being made in the field of medicine, particularly tropical medicine and the control of diseases such as yellow fever, malaria, and leprosy. However, as is the case in most developing nations, there is a serious shortage of trained doctors, nurses, and medical technicians.

In the fields of architecture, music, and art, Brazil has produced some outstanding personages. Here again, though, is found the impact of the low literacy rate. The lack of an adequate educational system and the high incidence of disease among the masses restricts Brazil's ability to produce large numbers of persons who are qualified in these fields.

Brazil and the United States.

The relations of the United States and Brazil have generally been characterized by a mutuality of interest in international security and trade. The United States has been accused of taking Brazil for granted, of fostering the spread of United States private industy, and of only containing communism.

With the rise of Castro communism in Cuba, Latin America has become a major concern to the United States. It became evident that our efforts should emphasize the improvement of living standards and the elimination of social unrest to insure the preservation of freedom.

Conclusions.

From the review of the power potential of Brazil, it seems obvious that she can become a world power but only if she can accomplish vast reforms in many areas. The country is potentially one of the richest nations in the world, occupies the key location in

the Southern Hemisphere, and, therefore, is of great strategic importance.

The fast growing industrialization is placing extreme demands on her already lagging educational system. The high illiteracy rate coupled with the requirement for technical skills to meet the needs of industry point up the requirement for the development of an educational system which will be responsive to the needs of the individual and the country.

Until the present chief executive took power, the economy was in jeopardy and stable leadership had been lacking. Branco today is looking for someone to succeed him who will continue his political, economic, and social reforms.

The Communist threat in Brazil could become serious; it is more active now than at any time since the party was outlawed in 1947. The social and economic difficulties are being exploited by the Communists, and this could lead to open rebellion if the situation is not quickly remedied. As is the case in most Latin American countries, this threat is being aided and abetted by Soviet Russia and Communist China, primarily through Cuba.

Brazil, being primarily an agricultural country, is desperately in need of agricultural reforms. Mechanization and a more efficient use of labor are required. Over half of her people work in agriculture, yet only two percent of the land is cultivated.

Broad social reforms are needed to improve the standard of living of the people. They need better housing, an improved diet,

better health conditions, and vastly improved infant and child care to reduce the high infant mortality rate.

Brazil can no longer depend upon an essentially one commodity economy as she has done for so long. Her economy must be diversified and she must increase production and productivity. In so doing, she can at the same time gain a more favorable balance of trade.

Brazil is ambitious to become recognized as a world power, but if she is to become the land of the future and a real asset to the West, she must make substantial achievements in the areas just discussed. Because of her strategic importance and her power potential, Brazil cannot be lost by the West. Recommendations.

The United States should assist Brazil in accomplishing the much needed reforms by providing economic assistance through the "Alliance for Progress," the Inter-American Development Bank, and similar organizations. In addition, aid can be provided by our continuing to be Brazil's principal export customer, by continued military assistance, by working toward a Latin American "common market" to reduce trade barriers, by the student exchange program, by encouraging private investment in Brazil, and by urging other Western countries to extend long term credits to Brazil so that she can help herself.

These steps are not enough. The United States must also sell itself and its programs to the people of Brazil. We must

stop the frequent charges of "Yankee Imperialism" and see to it that our intentions are not misunderstood. Brazil is the keystone of South America and her destiny is of vital importance to the security of the United States.

BERKELEY S. GILLESPIE

Lt Col,

BIBLIOGRAPHY

 "Brazil." <u>Time</u>. New York: Time Incorporated, 11 Feb. 1966, pp. 32-35.

(An excellent summation of the problems involved in the 1966 elections.)

 Camacho, J. A. <u>Brazil</u>. London: Royal Institute of International Affairs, 1954. (F2508 C3)

(A concise study of the history, geography, demography, economy, and politics of Brazil.)

3. Freyre, Gilberto. The Mansions and the Shanties. New York: Alfred A. Knopf, 1963. (F2510 F711)

(A detailed description of the contrast between the city mansion and the slum shanty.)

4. Jackson, Harry R. <u>Brazil-US Dilemma</u>. Thesis. Carlisle Barracks: US Army War College, 6 Mar. 1964. (AWC Log #64-3-94U)

(The author concludes that Brazil has the potential for growth as a world power but that this only can be accomplished by vast reforms.)

- 5. Life World Library. <u>Brazil</u>. New York: Time Incorporated, 1962.
- 6. Schramm, Robert F. <u>Brazil--What About It?</u> Thesis. Carlisle Barracks: US Army War College, 6 Mar. 1964.

 (AWC Log #64-3-167U)

(The author concludes that for Brazil to realize her growth potential she must institute social and economic reforms and that the United States must provide assistance.)

- 7. Smith, T. Lynn, and Marchant, Alexander. <u>Brazil</u>, <u>Portrait of Half a Continent</u>. New York: The Dryden Press, 1951. (F2508 S62)
- 8. The World Book. Chicago: Field Enterprises Educational Corporation, Vol. 2.
- 9. Wagley, Charles. An Introduction to Brazil. New York: Columbia University Press, 1963. (F2510 W3)

(An excellent book dealing with Brazil's rise to greatness and her increasingly influential role in the Americas and the world.)

10. White, Peter T. "Giant Brazil." National Geographic Magazine. Washington: Sep. 1962, pp. 299-355.

(A very worthwhile article on the country and its people.)